



ENERGY STAR[®] Program Requirements for Displays

Draft Partner Commitments

Following are the terms of the ENERGY STAR Partnership Agreement as it pertains to the manufacture and labeling of ENERGY STAR qualified products. The ENERGY STAR Partner must adhere to the following partner commitments:

Qualifying Products

1. Comply with current ENERGY STAR Eligibility Criteria, which define performance requirements and test procedures for Displays. A list of eligible products and their corresponding Eligibility Criteria can be found at www.energystar.gov/specifications.
2. **Prior to associating the ENERGY STAR name or mark with any product**, obtain written certification of ENERGY STAR qualification from a Certification Body recognized by EPA for Displays. As part of this certification process, products must be tested in a laboratory recognized by EPA to perform Displays testing. A list of EPA-recognized laboratories and certification bodies can be found at www.energystar.gov/testingandverification.

Using the ENERGY STAR Name and Marks

3. Comply with current ENERGY STAR Identity Guidelines, which define how the ENERGY STAR name and marks may be used. Partner is responsible for adhering to these guidelines and ensuring that its authorized representatives, such as advertising agencies, dealers, and distributors, are also in compliance. The ENERGY STAR Identity Guidelines are available at www.energystar.gov/logouse.
4. Use the ENERGY STAR name and marks only in association with qualified products. Partner may not refer to itself as an ENERGY STAR Partner unless at least one product is qualified and offered for sale in the U.S and/or ENERGY STAR partner countries.
5. Provide clear and consistent labeling of ENERGY STAR qualified Displays.

5.1. The ENERGY STAR mark must be clearly displayed:

5.1.1. On the top or front of the product. Labeling on the top or front of the product may be permanent or temporary. All temporary labeling must be affixed to the top or front of the product with an adhesive or cling-type application;

Electronic Labeling Option: Partners have the option of using an alternative electronic labeling approach in place of this product labeling requirement, as long it meets the following requirements:

– The ENERGY STAR mark in cyan, black, or white (as described in "The ENERGY STAR Identity Guidelines" available at www.energystar.gov/logos) appears at system start-up. The electronic mark must display for a minimum of 5 seconds;

– The ENERGY STAR mark must be at least 10% of the screen by area, may not be smaller than 76 pixels x 78 pixels, and must be legible.

EPA will consider alternative proposals regarding approach, duration, or size for electronic labeling on a case-by-case basis.

5.1.2. In product literature (i.e. user manuals, spec sheets, etc.);

- 5.1.3. On product packaging for products sold at retail; and
- 5.1.4. On the Partner's Internet site where information about ENERGY STAR qualified models is displayed:
 - 5.1.4.1. If information concerning ENERGY STAR is provided on the Partner Web site, as specified by the ENERGY STAR Web Linking Policy (this document can be found in the Partner Resources section on the ENERGY STAR Web site at www.energystar.gov), EPA may provide links where appropriate to the Partner Web site

Verifying Ongoing Product Qualification

- 6. Participate in third-party verification testing through a Certification Body recognized by EPA for Displays, providing full cooperation and timely responses, EPA/DOE may also, at its discretion, conduct tests on products that are referred to as ENERGY STAR qualified. These products may be obtained on the open market, or voluntarily supplied by Partner at the government's request.

Providing Information to EPA

- 7. Provide unit shipment data or other market indicators to EPA annually to assist with creation of ENERGY STAR market penetration estimates, as follows:
 - 7.1. Partner must submit the total number of ENERGY STAR qualified Displays shipped in the calendar year or an equivalent measurement as agreed to in advance by EPA and Partner. Partner shall exclude shipments to organizations that rebrand and resell the shipments (unaffiliated private labelers).
 - 7.2. Partner must provide unit shipment data segmented by meaningful product characteristics (e.g., type, capacity, presence of additional functions) as prescribed by EPA.
 - 7.3. Partner must submit unit shipment data for each calendar year to EPA or an EPA-authorized third party, preferably in electronic format, no later than March 1 of the following year.Submitted unit shipment data will be used by EPA only for program evaluation purposes and will be closely controlled. If requested under the Freedom of Information Act (FOIA), EPA will argue that the data is exempt. Any information used will be masked by EPA so as to protect the confidentiality of the Partner;
- 8. Report to EPA any attempts by recognized laboratories or Certification Bodies (CBs) to influence testing or certification results or to engage in discriminatory practices.
- 9. Notify EPA of a change in the designated responsible party or contacts within 30 days using the My ENERGY STAR Account tool (MESA) available at www.energystar.gov/mesa.

Other

- 10. For products with LCD panels, Partner shall source LCD components from suppliers who have demonstrated that, for manufacturing processes that emit fluorinated greenhouse gas emissions (F-GHGs), they are recovering or destroying on an annual basis at least 90 percent of the F-GHGs used in the production of LCD panels for ENERGY STAR qualified products. The 90 percent reduction rate refers to the average rate across all of a supplier's manufacturing facilities, and can be based on measurements from a representative and random sampling of abatement equipment.
 - 10.1. Gases covered include CF₄, C₂F₆, C₃F₈, C-C₄F₈, C₄F₈O, CHF₃, Nitrogen Trifluoride (NF₃), Sulfur Hexafluoride (SF₆).

- 10.2. In the case where Partner is using F-GHG abatement technology, Partner will work with its suppliers to ensure they use EPA's Protocol for Measuring Destruction or Removal Efficiency (DRE) of Fluorinated Greenhouse Gas Abatement Equipment in Electronics Manufacturing (available at http://epa.gov/semiconductor-pfc/documents/dre_protocol.pdf) or other international measurement methodologies that are developed and demonstrated to produce results equivalent to or exceeding the accuracy and precision of EPA's DRE Protocol.
- 10.3. LCD suppliers can meet this requirement by reporting to the Carbon Disclosure Project (CDP - www.cdproject.net), a widely-used public carbon reporting initiative, or another viable industry data collection initiative.
- 10.3.1. If suppliers choose to report to CDP, they shall report their F-GHG emissions and describe their abatement efforts using CDP's Investor questionnaire. If the ENERGY STAR Partner is also a CDP Supply Chain Partner, suppliers can use Supplier questionnaire instead. Suppliers should specify how they are measuring and removing or destroying F-GHGs, as well as their calculated F-GHGs, in relevant Sections 7, 8, 9, and 13 of either questionnaire (if the supplier obtained third party assurance, it should specify so in Section 15).
- 10.3.2. If another reporting program is used, it must collect: 1) the calculated F-GHG emissions from LCD manufacturing; 2) methodology used; and 3) a description of abatement steps suppliers have taken to remove or destroy F-GHGs. It must make summary reports publicly available or available to EPA upon request. If requested by EPA, information will be used for program evaluation purposes only and will be closely controlled. If requested under the Freedom of Information Act (FOIA), EPA will argue that the data is exempt. Any information used will be masked by EPA so as to protect the confidentiality of the Partner and its suppliers.

Note: EPA is asking manufacturers to work with their suppliers to ensure that F-GHGs are measured in accordance with EPA's Protocol for Measuring Destruction or Removal Efficiency (DRE) of Fluorinated Greenhouse Gas Abatement Equipment in Electronics Manufacturing because it is the only thoroughly field-tested and internationally peer reviewed method currently available for removing or destroying F-GHGs in LCD manufacturing. However, based on new findings from discussions with stakeholders, EPA will also accept other nationally acceptable measurement methods if results equal or exceed the accuracy and precision of EPA's DRE Protocol.

EPA has also clarified that the 90 percent reduction rate refers to an average rate across all manufacturing facilities, and is based on measurements from a representative and random sampling of abatement equipment.

Based on discussions with stakeholders, EPA has learned that LCD manufacturers are presently at various stages of installing and scaling up their F-GHG emissions controls, as well as measuring emissions annually across their facilities. EPA is currently exploring a viable timeframe for ensuring compliance with this requirement, and welcomes stakeholder feedback. EPA is also interested in highlighting strides already made by manufacturers to reduce their F-GHG emissions, and welcomes feedback on how best to do so.

EPA welcomes stakeholder feedback on whether non-F-GHGs and non-GHG emitting technology can be used to manufacture LCD panels.

EPA has explored the extent to which this requirement could be met through participation in existing initiatives. Based on discussions with stakeholders affiliated with, or participating in, various industry initiatives, EPA has determined that the Carbon Disclosure Project (CDP) provides a viable, cost-free, and transparent avenue for reporting conformance with this requirement. Upon examining the CDP questionnaire, EPA has deemed it feasible to add information on F-GHG abatement efforts to CDP's

existing survey structure.

Many corporations are already participating in the CDP's annual survey, and report their GHG emissions publicly. At least five major LCD suppliers to ENERGY STAR manufacturing partners report to the CDP, and ENERGY STAR Partners, Acer, Asus, Dell, and Philips, are also members of the CDP's Supply Chain initiative, where CDP sends its questionnaire to suppliers on behalf of their customers, asking them to measure and publicly report their direct and indirect GHG emissions.

However, EPA has proposed leaving the possibility of reporting conformance with this requirement open to more than one organization should another initiative that works with industry to measure and/or reduce GHG emissions wish to collect information specific to F-GHG measurement and abatement efforts. Such an organization would also need to publicize the findings or make them available to EPA upon request. EPA is aware that industry initiatives such as the Electronics Industry Citizenship Coalition (EICC), or public recognition efforts such as the Carbon Trust's Carbon Label, currently play an important role in promoting supply chain sustainability. Such programs may continue to evolve, and, should they address F-GHG abatement efforts in LCD production in the future, EPA could recognize additional avenues for reporting conformance with this requirement.

11. Display products shall be packaged in a way that adheres to at least two of the following eight best practices.

- Is beneficial, safe, and healthy for individuals and communities throughout its lifecycle;
- Meets market criteria for both performance and cost;
- Is sourced, manufactured, transported, and recycled using renewable energy;
- Optimizes the use of renewable or recycled source materials;
- Is manufactured using clean production technologies and best practices;
- Is made from materials healthful in all probable end-of-life scenarios;
- Is physically designed to optimize materials and energy; and
- Is effectively recovered and used in biological and/or industrial closed-loop cycles.

Note: Consistent with the ENERGY STAR commitment to delivering energy efficiency along with the product features and functions that consumers value, EPA would like to ensure that ENERGY STAR products are increasingly being packaged in a way that reduces environmental impacts, and where existing standards can be referenced. To this end, for stakeholder consideration, EPA has referenced the broad definitions for sustainable packaging that were developed with industry participation by the Sustainable Packaging Coalition. These definitions are also currently referenced by other EPA programs. Since packaging decisions are made at a fleet level, EPA deemed it more appropriate to propose including this requirement at the Partner Commitment level rather than the product level. EPA envisions that manufacturers would have flexibility in selecting which best practices mirror their existing and growing efforts to reduce the impacts of product packaging.

EPA anticipates that existing reporting efforts and maintenance of relevant quality assurance documentation would demonstrate compliance with this requirement. In the future, EPA envisions replacing these broad packaging requirements with requirements that are tailored for the electronics industry, as needed and when they are available.

Performance for Special Distinction

In order to receive additional recognition and/or support from EPA for its efforts within the Partnership, the ENERGY STAR Partner may consider the following voluntary measures, and should keep EPA informed on the progress of these efforts:

- Provide quarterly, written updates to EPA as to the efforts undertaken by Partner to increase availability of ENERGY STAR qualified products, and to promote awareness of ENERGY STAR and its message.
- Consider energy efficiency improvements in company facilities and pursue benchmarking buildings through the ENERGY STAR Buildings program.
- Purchase ENERGY STAR qualified products. Revise the company purchasing or procurement specifications to include ENERGY STAR. Provide procurement officials' contact information to EPA for periodic updates and coordination. Circulate general ENERGY STAR qualified product information to employees for use when purchasing products for their homes.
- Feature the ENERGY STAR mark(s) on Partner website and other promotional materials. If information concerning ENERGY STAR is provided on the Partner website as specified by the ENERGY STAR Web Linking Policy (available in the Partner Resources section of the ENERGY STAR website), EPA may provide links where appropriate to the Partner website.
- Ensure the power management feature is enabled on all ENERGY STAR qualified displays and computers in use in company facilities, particularly upon installation and after service is performed.
- Provide general information about the ENERGY STAR program to employees whose jobs are relevant to the development, marketing, sales, and service of current ENERGY STAR qualified products.
- Provide a simple plan to EPA outlining specific measures Partner plans to undertake beyond the program requirements listed above. By doing so, EPA may be able to coordinate, and communicate Partner's activities, provide an EPA representative, or include news about the event in the ENERGY STAR newsletter, on the ENERGY STAR website, etc. The plan may be as simple as providing a list of planned activities or milestones of which Partner would like EPA to be aware. For example, activities may include: (1) increasing the availability of ENERGY STAR qualified products by converting the entire product line within two years to meet ENERGY STAR guidelines; (2) demonstrating the economic and environmental benefits of energy efficiency through special in-store displays twice a year; (3) providing information to users (via the website and user's manual) about energy-saving features and operating characteristics of ENERGY STAR qualified products; and (4) building awareness of the ENERGY STAR Partnership and brand identity by collaborating with EPA on one print advertorial and one live press event.
- Join EPA's SmartWay Transport Partnership to improve the environmental performance of the company's shipping operations. The SmartWay Transport Partnership works with freight carriers, shippers, and other stakeholders in the goods movement industry to reduce fuel consumption, greenhouse gases, and air pollution. For more information on SmartWay, visit www.epa.gov/smartway.
- Join EPA's Green Power Partnership. EPA's Green Power Partnership encourages organizations to buy green power as a way to reduce the environmental impacts associated with traditional fossil fuel-based electricity use. The partnership includes a diverse set of organizations including Fortune 500 companies, small and medium businesses, government institutions as well as a growing number of colleges and universities. For more information on Green Power, visit www.epa.gov/greenpower.

Note: A growing number of large electronics companies have begun asking their top suppliers to measure and reduce their corporate-wide GHG emissions and also set public-facing GHG reduction goals. Collaborative initiatives among common industries such as the Electronics Industry Citizens Coalition (EICC) have also developed jointly sponsored supplier training programs or used a common information collection system to gather data from their suppliers. As mentioned in the previous notebbox, certain ENERGY STAR Partners are also members of the Carbon Disclosure Project's (CDP) Supply Chain initiative.

EPA applauds current industry efforts to engage suppliers on measuring and reducing corporate-wide

GHG emissions from both direct combustion sources and indirect sources, such as purchased electricity. EPA encourages more Partners to engage key suppliers to measure and reduce their GHG emissions by developing supplier engagement programs and/or by collaborating with other companies to reach shared suppliers through collective outreach and training efforts. Partners are also encouraged to ask suppliers to report their GHG emissions publicly and set public GHG emissions reduction goals. In order to recognize such efforts, EPA will consider such activity, along with others in this category, for purposes of Manufacturer Partner of the Year.

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